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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,842

07/23/2003

Alan Phillips

PTG 02-76-2

9276

28268

7590

05/12/2006

THE BLACK & DECKER CORPORATION

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EXAMINER

ROSS, DANA

ART UNIT

PAPER NUMBER

3722

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/626,842

Applicant(s)

PHILLIPS ET AL.

Examiner

Dana Ross

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 54-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16, 54, 55 and 59-70 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 9, 10, 12 and 56 is/are rejected.
- 7) ☒ Claim(s) 3, 6-8, 11, 13-15, 57 and 58 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Drawings

1. The replacement drawing sheet for Figure 2 was received on 13 February 2006. This drawing is acceptable.

Claim Rejections - 35 USC § 112

2. The previous 35 USC 112 rejection is withdrawn due to Applicant's amendment filed 13 February 2006.

Claim Objections

3. Claim 12 is objected to because of the following informalities: It appears Applicant has inadvertently removed the term "shank" at the end of the sentence. Appropriate correction is required.

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 4, 5, 9, 10, 12 and 56 rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Pat. Pub. No. 2001/0043841 (Wienhold, hereafter '841).

Regarding claims 1, 9 and 56, '841 teaches a rotary tool bit system including a cutter head and shank (see paragraph 0003); a router bit holding assembly including a chuck 12 having a bore (see figure 1 below) for receiving the shank (see figure 1 below), the chuck having an opening radially formed therein (see figure 1 below); a ball 16 received in the opening (see figure 1 below) for engaging the annular opening (see figure 1 below) of the shank (see figure 1 below) when the shank (see figure 1 below) is received in the bore (see figure 1 below); a collar 14 concentrically disposed about the chuck 12, the collar 14 sliding axially between a first position (see figure 1) and second position (see figure 2); wherein when the collar is moved to the first position (figure 1) the collar 14 is configured to hold the ball 16 in engagement with the annular groove (see figure 1 below) and when the collar is moved to the second position (see figure 2) the collar 14 is configured to allow the ball 16 to be disengaged from the annular groove (see figure 1 below).

Regarding claims 2 and 10 '841 teaches spring assembly for biasing the collar 14 to the first position (see figure 1 below and paragraph 0034, for example) and the compression spring being compressed as the collar 14 is moved to the second position.

Regarding claims 4, 5 and 12, as seen in figure 1 below, the tool bit has a tapered end and is the bore is configured to receive the shank.

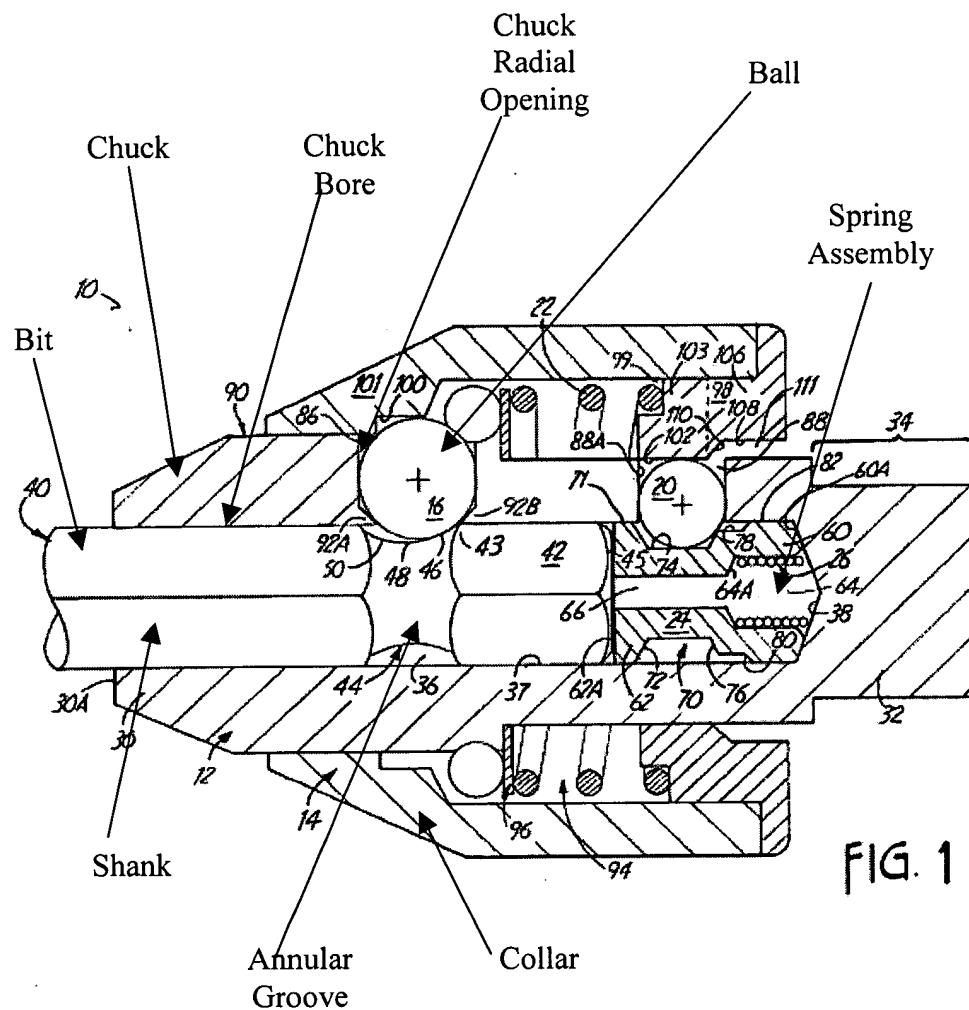


FIG. 1

Patent Application Publication Nov. 22, 2001 Sheet 1 of 12 US 2001/0043841 A1

Examiner notes that '841 does not expressly disclose the term "router" in the list of rotary tools.

In the alternative, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of a router tool bit in the tool bit holder as taught by '841 for the purpose of providing increased capabilities to the chuck assembly within the

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machine tool industry and to have the option of performing a routing operation on a workpiece dependent on the type of machining required at the time.

Allowable Subject Matter

6. Claims 3, 6-8, 11, 13-15, 57 and 58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not anticipate nor render obvious the limitations of the dependent claims.

Regarding claims 3 and 11, '841 teaches the opposite movement of the spring in that the spring is compressed as the collar moves to the first position, not the second position as claimed.

Regarding claims 6, 7 and 57, '841 does not the second end as claimed. Regarding claims 8 and 15, '841 does not disclose the collar with an internal annular tapered groove for biasing the ball inwardly within the opening in the chuck. Regarding claims 13, 14 and 58, '841 does not disclose the anti-rotation portion as claimed.

Therefore '841 does not anticipate the claimed inventions.

Furthermore, there is no prior art, either alone or in combination with '841 that would render obvious the claimed combination of limitations, and no motivation found to modify '841 to obtain the claimed inventions.

8. Claims 16, 54, 55, 59-70 are allowed.

9. The following is an examiner's statement of reasons for allowance: The prior art neither anticipates nor renders obvious a router bit as claimed in independent claim 16, specifically wherein the combination of limitations includes a second end having a slot configured to be

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engaged by a first engagement portion of a bit holding assembly of a router and an annular groove formed therein configured to be engaged by a second engagement portion of the bit holding assembly; a router bit system as claimed in independent claim 59, specifically wherein the combination of limitations includes when the collar is moved to the first position the collar holds the second engagement member in engagement with the second anti-rotation portion and when the collar is moved to the second position the collar allows the second engagement member to be disengaged from the second anti-rotation portion; or a router bit holding assembly as claimed in independent claim 65, specifically wherein the combination of limitations includes when the collar is moved to the first position the collar holds the second engagement member in engagement with the second anti-rotation portion and when the collar is moved to the second position the collar allows the second engagement member to be disengaged from the second anti-rotation portion.

The closest prior art found is US Pat. No 4,818,157 (Kouvelis, hereafter '157) which teaches a tool bit and adapter; US Pat. No. 5,820,135 (Han et al., hereafter '135) which teaches a tool holder; and US Pat. Pub. No. 2001/0043841 (Wienhold, hereafter '841) which teaches tool holder.

These references are discussed in detail in the previous office action and the above rejection.

Annular grooved tool bits (see US 6,688,610 for example) and slotted tool bits ends (see JP 2002-355727 for example), are well known in the art, but the combination of the features is not.

Regarding claim 16, the closest prior art is '157 as discussed in the previous office action and '841 as discussed above. '157 and '841 do not disclose a second end having a slot configured to be engaged by a first engagement portion of a bit holding assembly of a router and an annular groove formed therein configured to be engaged by a second engagement portion of the bit holding assembly.

Therefore claim 16 is not anticipated by the prior art. Furthermore, there is no prior art, either alone or in combination with '157 of '841 that would render obvious the claimed invention, and no motivation found to modify either '157 to obtain the claimed invention.

Regarding claims 59 and 65, the closest prior art is '135 and '841. '135 and '841 do not disclose when the collar is moved to the first position the collar holds the second engagement member in engagement with the second anti-rotation portion and when the collar is moved to the second position the collar allows the second engagement member to be disengaged from the second anti-rotation portion.

'135 and '841 teach a tool holder with a tool bit with a tool shank without the first and second anti-rotation portions. Therefore neither '135 nor '841 anticipate the claimed inventions of independent claims 59 and 65.

Furthermore, there is no prior art, either alone or in combination with '135 that would render obvious the claimed invention, and no motivation found to modify '135 to obtain the claimed inventions.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is 571-272-4480. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



dmr

Monica S. Carter
MONICA CARTER
SUPERVISORY PATENT EXAMINER

And
of 1/29/06

Replacement Sheet

Title: Router Bit System

Inventor(s) Alan Phillips et al

Serial No.: 10/626,842

Filing Date: July 23, 2003

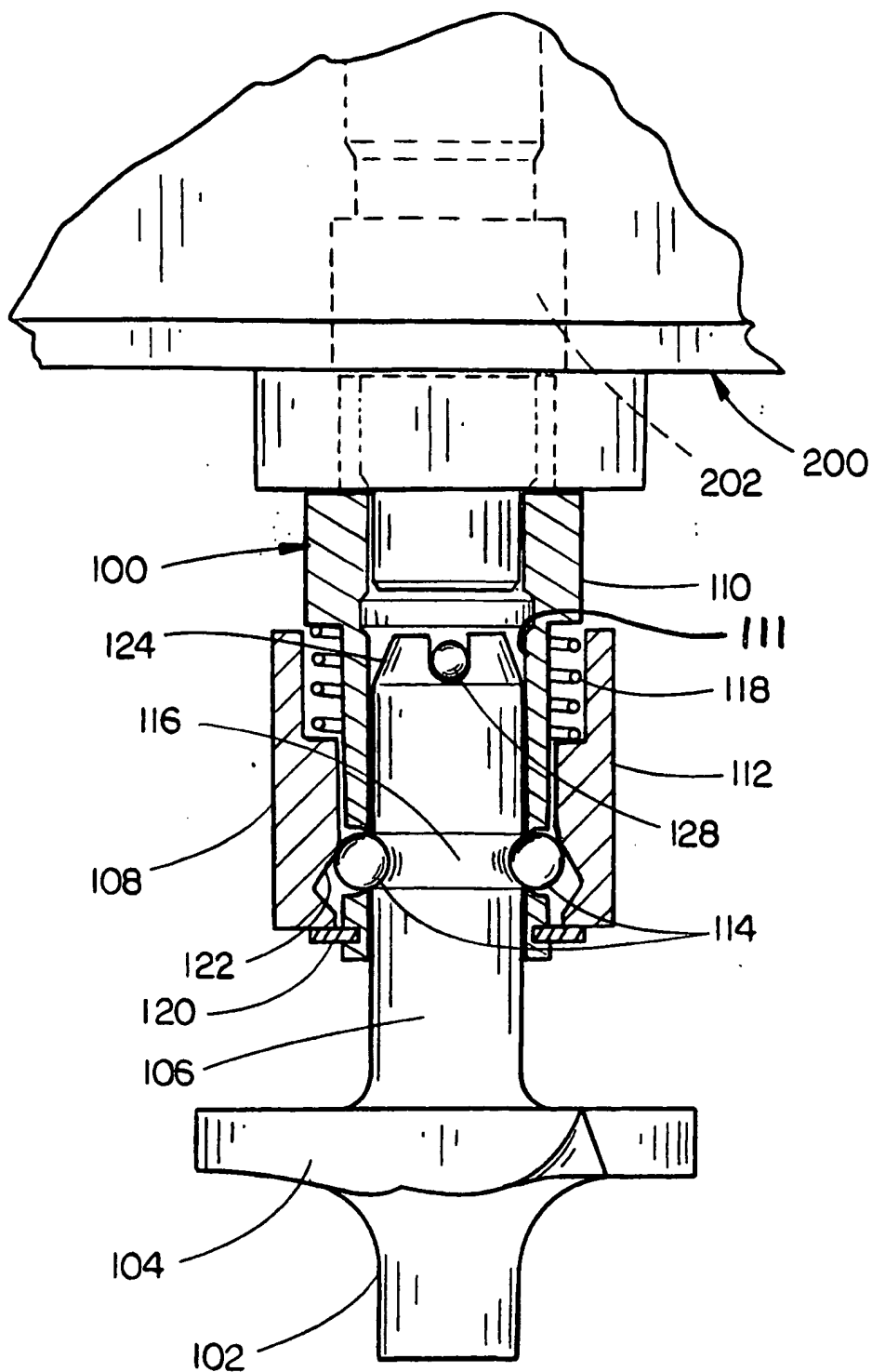


FIG. 2